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NOTES ON FOREIGN MILITARY SCHOOLS, SHOWING THEIR CONDITION AND OR- GANIZATION IN THE YEAR 1840.

COLLECTED BY AN OFFICER OF THE U. S. ARMY.

I. FRANCE.

France may be regarded as the mother of military science. Her military schools have long enjoyed the very highest reputation; they have produced the best theoretical and practical generals of modern ages, and their professors are now the most distinguished in the world for their exact knowledge of the several branches of the art of war. The scientific corps have no equals among other nations. To the *corps du genie* we are indebted, almost exclusively, for the development of the principles of military defence and the science of fortification, and for many improvements in the construction of civil works. The artillery corps is also very distinguished in its particular branch of the military profession.

The principal cause of this peculiar distinction of the French in military science must be sought for in the excellence of their military schools. Let us examine the details of the organization of these schools, taking them according to the order of arrangement in the "Annuaire Militaire."

But, first, it will be well to give a brief history of the special military schools existing in France previous to the formation of the present establishments.

An Artillery School was first established at La Fère in 1756, transferred to Bapaume in 1766, suppressed in 1772, and replaced in 1779 by the creation of six *places d'élèves* in each of the seven regimental schools. It was re-established at Chalons-sur-Marne in 1790. This school was very incomplete in its organization, and the course of instruction so deficient, previous to its connection with the engineer school, that it could impart but a very imperfect military education, and one to which no high value was attached.

The Military Engineer School, founded at Mézières, in 1748, enjoyed, on the contrary, a very high and merited reputation. It afterwards served as the model for the Polytechnic School. Here were educated Monge and others, celebrated for their knowledge and application of the exact sciences. In 1794 this school was transferred to Metz, and its organization slightly changed.

The School of Roads and Bridges was founded in 1747, upon very different principles from the others. Here no preliminary examinations were required, but favor alone decided the choice of candidates. The pupils were instructed by the public lectures in the

capital, and by their older comrades. It was interrupted by the wars of the revolution, but revived some time afterwards.

The School of Naval Engineers was established at Louvre in connection with the Academy of Sciences, and was suppressed in 1793.

The School of Miners, established before the revolution, was changed at the reorganization of that corps in 1794.

The Military Engineer School, as has already been mentioned, was removed from Mézières to Metz in 1794; the Artillery School at Chalons-sur-Marne was united with it in 1802, and they together took the name of—

I. ECOLE D'APPLICATION DE L'ARTILLERIE ET DU GENIE; or Artillery and Engineer School of Application.—This school received various modifications in 1807, 1821, and 1823; but in 1831 it received a new and definitive organization in all its parts, which it has since retained. It is now composed only of such pupils of the Polytechnic School as have been declared by the board of examiners of that school to be admissible into the public service, and are destined to become engineers, or land or sea artillerymen. They are here specially instructed in the duties of those two arms. The Minister of War has the general superintendence of the school, and each year determines the number of pupils to be received for each of these corps. At entering, each of the pupils receives the rank of sub-lieutenant, and on graduating, certain marks of distinction. The whole number of pupils at this school in 1840 was ninety-five, of which forty were for the engineer corps, and fifty-five for the artillery.

According to the Annuaire of 1840, of the academic staff, the commandant-in-chief, one chef-de-battalion, and three captains, were engineer officers; the second commandant, one chef-d'esquadrone, and three captains, were artillery officers. In addition to these officers, there is attached to the school a sergeant-major, who must be an M. D. No member of this staff can remain at the school more than six years.

The commandant-in-chief must be a field-marshal; the second commandant may be a colonel or lieutenant colonel. The former is charged with the general direction of every thing relating to the school, and corresponds directly with the Minister of War; while the latter (under the other's authority) has the immediate direction of the studies, police, and discipline of the pupils, and the details of the administration of the school. The other officers of the staff are under his immediate command.

The several professors are selected by the Minister of War. The professors of fortifications must be chosen from the staff of the engineer corps; the other professors of the applied sciences may be taken in-

discriminately from the artillery and engineers. The several professorships are :

1st. Of the application of mathematics to artillery and military construction.

2d. Of mechanics, applied to machines.

3d. (A professor and one assistant,) of permanent fortification, and attack and defence of places.

4th. Of the military art and field fortification.

5th. Of architecture and military constructions.

6th. Geodesie and topography.

7th. A master of drawing.

8th. Of physics and chemistry applied to the military art.

9th. Of the German language.

10th. (A professor and one assistant) of hippiatrice and equitation.

The employés are, a librarian, treasurer, conservator of the physical and chemical laboratories, a mechanic and one assistant, an engineer guard, and an artillery guard. The buildings for this school include quarters, rooms for recitations, a library, cabinets of minerals, of vegetables, models, maps, &c., a chemical laboratory, riding halls, magazines, store-rooms for tools, instruments and machines, &c.

The appointments are sent to the commandant of the school by the Minister of War in the first week of December of each year, and the pupils must report by the 28th of January. The course of instruction commences on the 1st of February, and continues two years, or at most three. The pupils are divided into two divisions; the *first* division, including those of the second year's course, and the *second* division those of the first year's course. Six hours of each day must be employed in the halls and places of instruction, exclusive of the time spent in military exercises. When the pupils are engaged on the works of practice, an additional number of officers are attached to the staff.

The council of instruction regulates the programme of studies and exercises; selects the books, maps, &c., for the library, the models, &c., for the cabinets; directs the expenditure of the funds, and fixes the merit-roll of the pupils at all the examinations previous to that for graduation. At the end of each year it unites with the board of examination to make a general report on the course of instruction, &c. The recommendations of this council for any change in the institution, are first submitted to a mixed commission of engineer and artillery officers, and then are submitted for approval to the Minister of War. This council is composed of the two commandants, the two chef-d'esquadrans, and three professors, one of whom must be a professor of engineering. On certain occasions, such as examining the pupils and making the annual report, all the professors (and sometimes the assistants also) are added to this council. A captain of the staff acts as secretary of the council.

The board of examination (for the graduating division of the pupils) is composed of a lieutenant general, taken alternately from each of the two corps of artillery and engineers, one field marshal and one superior officer from the engineers, and one field marshal and one superior officer from the artillery, and

a civil examiner for the application of physical and mathematical sciences. This individual, and the two above-mentioned superior officers of artillery and engineers, are the examiners for the board. But these general and superior officers of the school cannot act as a part of this board. The members are selected by the Minister of War; they assemble at Metz each year, on the 1st of January. The examinations are made by the three examiners in the presence of the board. In making out the relative graduating standing of the pupils, the board take into consideration the reports and remarks of the several professors, and the studies and works of the pupils, and also the provisional merit-rolls established by the council of instruction. Those who pass the examination honorably are assigned to the corps for which they are destined, in the order of rank determined by the board. Those who have not quite completed their course of instruction, but still are found *proficient*, are allowed till the 1st of the following April to finish their works; those *deficient*, from some excusable cause, such as sickness, &c., are turned back to remain a third year; those deficient through negligence or incompetency are not allowed to remain, unless specially recommended by the board. None are allowed to remain more than three years. Those found deficient at the end of this course are not allowed to enter either the engineers or artillery. The graduates have a furlough till the 1st of April.

The examinations of the second division is made by the council of instruction; but those who have been found deficient in their first year's course are re-examined by the board of examination, and a special report of all the circumstances of their cases made to the Minister of War.

On account of the time devoted to study at the Polytechnic School, and in preparation for that school, the rank of each engineer and artillery officer is antedated four years before his admission to the Metz School of Application.

No pupil of this school can be expelled except by order of the King, on the recommendation of the Minister of War, the case of the accused having previously been submitted to a court or board of officers of his particular corps. The accused is always allowed an opportunity for defence.

The annual pay of each pupil is 1,300 francs. The principal expenses, such as for quarters, fuel, lights, stationery, books, instruments, &c., are paid out of the public treasury.

The staff officers of this school, the officers acting as professors, the surgeon major, and the military employés, receive the full pay of their grades in active service, and an extra allowance equal to one-third of their salaries. If this pay of the officers, acting professors, and assistant professors should not equal the minimum allowances of the civil professors and their assistants, the deficiency must be made up from the funds of the school. Their pay must also increase with length of service in the same way as that of the civil professors.

Francs.

Pay of the civil professors of the sciences is 4,000
Pay of their assistants, 2,400

Pay of the professor of the German language,	2,000
Pay of the librarian,	2,400
Pay of the chief mechanic,	2,000
Pay of the assistant mechanic,	1,200
Pay of the treasurer,	2,500

Pay of the professor of equitation, pay and emoluments of a captain of horse artillery.

Pay of the assistant professor of equitation, pay and emoluments of a lieutenant of horse artillery.

The several professors and assistants, and the chief mechanic and assistant, receive the following additional allowance for length of service in these particular duties:

Over 10 and under 15 years, $\frac{1}{3}$ of their allowance.

Over 15 and under 20 years, $\frac{2}{3}$ of their allowance.

Over 20 years, $\frac{1}{2}$ of their allowance.

II. *ECOLE D'APPLICATION DU CORPS ROYAL D'ETAT MAJOR*; or, School of Application for the Royal Staff Corps, at Paris.—This school was established in 1818 for the instruction of pupils for the staff service. The whole number of pupils is fifty, of which one-half are annually admitted, the course of instruction being of two years' duration. They are selected from among the sub-lieutenants of the line and the graduates of the Polytechnic School, and of the special military school at Saint Cyr. According to the "Annuaire" of 1840, the number then present was forty-eight, of whom fourteen were from the army, five from the Polytechnic School, and the other twenty-nine from the Saint Cyr School. At the close of their course of instruction at this school, those pupils who pass a satisfactory examination are called, according to the order of their graduation, to the vacant lieutenantcies in the royal staff corps, and are detached from their regiments for the term of four years.

The staff of this school consists of one commandant and five directors of studies. There are six military professors, viz: of military administration, topography, geography and statistics, military art and history, fortification, and artillery. Each of these, except the first, has an assistant; all are officers of the army. The civil professors are, one of descriptive geometry, two of foreign languages, one professor and one assistant of drawing, one of fencing, and one of equitation. There is a surgeon, and also a librarian, attached to the school. The course of instruction is said to be thorough and extensive. We have no programme in our possession, and cannot give the details.

III. *ECOLE ROYALE POLYTECHNIQUE*; or, the Royal Polytechnic School, at Paris.—The efficiency of the special military schools being destroyed by the early revolutionary measures, Monge, Lamblardie, Carnot, and others, immediately directed their attention to the establishment of a new school. Their project was carried into execution by the decree of 28th September, 1794, creating the "*Ecole Centrale des Travaux Publics*." In 1795 the name was changed to *Ecole Polytechnique*. This school underwent many changes previous to its receiving its present organization in 1832. We will mention some of these changes.

The conscription of the pupils in 1799 nearly destroyed the school, but its prosperity was restored on

the return of Napoleon from Egypt. In 1804 the pupils were formed into a military corps, armed as infantry, and quartered in barracks. Their pay was that of artillery sergeants. On the flag of this corps was inscribed, *Pour la patrie, les sciences, et la gloire*. Never, says Captain Grivet, in the days of ancient chivalry was a device more religiously observed.

In 1814, when the empire was endangered, these pupils volunteered their services, offering to fight in the ranks of the army. On the capitulation of Paris they were dispersed, but about two hundred of them afterwards resumed their places in the school. Again, in 1815, they organized for the defence of the capital; but when Paris again capitulated, they returned to their studies.

In 1816, the military character of the school was much affected by giving it a civil direction. Not finding this system to answer the desired end, in 1822 the military regime and discipline of the school was restored, and the course of instruction left entirely to the civil department; but in 1830 the military character was wholly restored, and the general direction given to the Minister of War. The pupils took a most active part in the revolution of July of this year, placing themselves at the head of the armed population of Paris, and by their military knowledge contributing greatly to the popular success. For this act of bravery and patriotism the new Government offered all of them the rank of lieutenant, to take effect immediately; they declined it, and returned to their studies. Those, however, who afterwards went to the Metz School of Application received the rank of sub-lieutenant, to date from August 6, 1830. We now come to the present organization.

This school is now designed for the education of officers; for the military and maritime engineer and artillery corps; for the royal marines and hydrographic engineers; for bridges, roads, and mines; for the powder and saltpetre manufactories; for the royal staff corps; and for such other public services as may require an extensive knowledge of the physical and mathematical sciences. It is under the special direction of the Minister of War.

The staff consists of a commandant-in-chief, who must be a general officer, a second commandant, who must be a superior officer, four captains-inspectors of studies, one captain-instructor of infantry, and four adjutants. The commandant is a field marshal of engineers, (*vaillant*), the second commandant a colonel of artillery. Two of the inspectors of studies are from the engineers and two from the artillery. The captain-instructor is an infantry officer, and the adjutants are taken from the several corps of the army. The two commandants and inspectors of studies must be graduates of the school. The former are selected by the King, and the latter by the Minister of War.

There are four examiners of candidates for admission to the school. They are appointed by the Minister of War, on the presentation of the council of instruction of the school. There are also two permanent and two temporary examiners for the standing and graduation of the pupils. The former are appointed by the King, on the recommendation of the Minister of War, their names having previously been

presented by the council of instruction of the school and by that of the Academy of Sciences. The others are appointed by the Minister on the presentation of the school. The academic faculty consist of—

- One director of studies.
- Two professors of analysis and mechanics.
- One professor of descriptive geometry.
- One professor of physics.
- Two professors of chemistry.
- One professor of geodesie, topography, machines, &c.
- One professor of architecture.
- One professor of French composition.
- One professor of the German language.
- One professor of the English language.
- Four masters of drawing.
- One master of topography.
- Twelve tutors in the several branches of instruction.
- There are also an indefinite number of assistant tutors.

The director of studies is appointed by the King: the professors, masters, and tutors by the minister; the first on the recommendation of the Academy of Sciences, and the latter on the recommendation of the school.

The other functionaries and employées consist of an administrator, an archivist, a librarian, a general guard, three conservators of scientific collections, a doctor and assistant, a surgeon and assistant, a dentist and an architect.

No one can be admitted to this school till he has been declared duly qualified by the board of examiners, who meet every year at Paris and the principal cities of the kingdom. The candidate must be a Frenchman, and between the ages of sixteen and twenty years. Persons of the regular military corps may enter till the age of twenty-five years, but on condition of serving two years after completing the course of instruction at the school. The pupils are selected by the Minister according to the merit-roll made by the board of examiners. On presenting themselves at the school, they are examined by the surgeon, and must furnish the bonds of their parents or guardians for their support at the school. Provision is made by Government for the support of a certain number of pupils whose parents are not able to educate them. The expenses are about 1,000 francs per annum for each pupil, exclusive of clothing. The number of pupils admitted each year depends upon the probable vacancies in the several corps supplied by this school, and is stated in the annual publication of the conditions of admission. The average number admitted yearly is about one hundred and thirty or one hundred and forty; the average number in the school at any one time being about three hundred. The four examiners divide between them the different districts in which the examinations are to be held. The performance of the candidates is registered according to a scale of marks, as nearly uniform as the judgment of different individuals allows; these registers being compared, the candidates are admitted in the order of merit thus determined, so far as the number of vacancies permits, the admission being made by the decision of the board.

The subjects upon which a candidate is examined are, 1st, arithmetic, in all its branches; 2d, elementary geometry; 3d, algebra; 4th, plain trigonometry; 5th, statistics; 6th, analytical geometry; 7th, use of logarithmic tables; 8th, Latin and French composition; 9th, crayon and instrumental drawing. Moreover, if the candidate possesses a knowledge of physics, chemistry, and the German language, they are all taken into the account. From the great excess in the number of applications over the number of vacancies, the competition is necessarily very severe. Only about one-fifth of those examined are admitted to the school. This keeps the standard of merit at the institution very high; nevertheless, its advantages are open to all of a suitable age, their admission depending solely upon their talents and acquirements. There is no opportunity for court or political favoritism. The board of examiners consists of the first and second commandants, the director of studies, the two permanent examiners attached to the school, and the four examiners for admission. Besides the students who regularly enter the school, a certain number of youths are permitted to attend the lectures, (*auditeurs libres*.) These are generally foreigners. Their number in 1837 was forty-five, being Englishmen, Belgians, Germans, Poles, Italians, Greeks, Wallacians, Turks, Egyptians, Mexicans, Brazilians; but, says Dr. Bache, "*not one citizen of the United States*." This results from the narrow-minded policy of our Government in allowing to so few of our military officers the opportunity of becoming acquainted with foreign military institutions and organizations.

The course of instruction continues two years, and includes the several branches mentioned under the heads of professors and instructors, and also lectures on anatomy and physiology. There are two divisions of the pupils for instruction, corresponding to the two years' duration of the course. No pupil is allowed to remain in one of these divisions more than two years, nor in the school more than three. To proceed from the first division to the second, or to graduate, an examination must be passed upon the studies of the year just elapsed. The programme of these studies is arranged by the councils of instruction and of improvement, which are constituted in nearly the same way as at Metz. This programme is very extensive, and the examinations on the several branches strict and even severe; but severe as they are, very few of the pupils fail to pass these examinations. This is mainly attributable to the closeness of the examinations for admissions. This is a great gain to the institution in every respect; on the score of moral and intellectual progress, as well as of discipline and economy. It is a well-known fact, that the greatest obstacle to the progress of the United States Military Academy, is the deleterious influence of cadets of low character and mean intellectual qualifications, who obtain appointments to the institution through the political influence of parents and friends. Such characters are pretty sure of expulsion in the end, but they are a great injury to the academy and expense to the country. Could not such appointments be avoided by some such liberal

system of selection as that adopted by the Polytechnic School?

The discipline of the Polytechnic School is thoroughly military, and means are provided for carrying it out in all its strictness. The regulations are very minute, and fix the punishment for each offence. The punishments are; 1st, private admonition by the commandants; 2d, public reprimand before the corps; 3d, confinement to the walls of the institution, or stoppage of leave; 4th, confinement to the house; 5th, imprisonment within the walls; 6th, military imprisonment; 7th, dismissal. For military exercises the pupils are divided into four companies, forming one battalion. The petty officers of the companies are selected from the corps of pupils. The graduates are allowed to choose, according to their order of merit, the particular corps, furnished by this school, to which they wish to be attached. If there are no vacancies for them, they may enter one of the other corps of public service, or remain at the school another year at the expense of Government.

The organization and duties of the council of administration are nearly the same as in our service.

The expenses of this school are borne by Government, and included in the annual budget of the War Department. The military officers of the school draw the full pay of active service, and an additional allowance to the commandant-in-chief of 6,000 francs, and to each of the others of a sum equal to one-third this salary.

The pay of the civil functionaries is as follows:

	Francs.
The director of studies,	10,000
The four examiners for admission, (not including travelling expenses, &c.,) each,	3,000
The two permanent examiners, each,	6,000
The two temporary examiners, each,	2,500
The three professors of modern languages, each,	3,000
The other professors, each,	5,000
The drawing masters, each, from 1,500 to	2,000
The tutors, each, from 1,500 to	2,000
The administrator,	6,000
The archivist and librarian, each,	4,000
The other functionaries, from 1,300 to	3,000

IV. *ECOLE DE CAVALLERIE*; or, Cavalry School at Saumur.—This school was established in 1825, for the purpose of forming instructors for the mounted troops, for imparting instruction to such of the graduates of the special military school as were designed for the cavalry corps, and for creating a good nursery for non-commissioned or sub-officer instructors. It secures a pretty thorough and uniform course of instruction in all the mounted regiments.

They admit to this school, 1st., one lieutenant or sub-lieutenant for each regiment of cavalry, artillery, or squadron of the train and of military equipages. 2d., graduates of the special military school, and infantry officers serving, in their turn, as cavalry. 3d., persons selected for sub-officers and drill-masters of cavalry. A school of army-farriers and trumpeters has been attached to the institution, where farriers and music boys are instructed in their appropriate duties.

The staff of this cavalry school consists of one first and one second commandant, one lieutenant colonel, two chefs-d'esquadron instructors, one major; thirteen captain instructors, ushers, &c., two lieutenant and two sub-lieutenant ushers, &c., three surgeons, hospital directors, commissaries, &c.

The commencement of the course is the first of October of each year. The number of pupils in 1840 was thirty.

V. *ECOLE SPECIALE MILITAIRE*; or, Special Military School at Saint Cyr.—Louis XV, first established *l'Ecole Royal Militaire* in 1751, at Vincennes, and afterwards removed it to the plain of Grenoble. If we mistake not, this school was replaced by the *Ecole de Mars* in 1794, and re-established in 1803 at Fontainebleau. It was transferred to Saint Cyr in 1809. From the restoration till 1817, when it received a new organization, it was merely a preparatory school. Its present organization was fixed in 1832.

When the re-establishment of this school was undergoing a discussion in the Council of State in 1802, Napoleon, who was always a strong advocate of military schools, defended this school in the following words:

“This institution diminishes the severity of the conscription. It enables the young man to complete his education, which the conscription would otherwise prevent, at the same time that he is learning the rudiments of the military art. I know of no other school equally well constituted; it will raise the organization of our army to the very highest point. The army under the Republic was, for a long time, supported by the youths who issued from this establishment in 1793. All the commanders of corps feel the want of skillful young men; I can appoint them from civil life; but if they are ignorant of the duties of the private soldier, it is felt as an injustice to the common men. The *Ecole Militaire* furnishes pupils instructed in both departments; and therefore its great excellence.”

This school, as now organized, is designed to furnish officers for the royal staff corps, the cavalry, and the infantry. No one can be admitted to it till after passing an examination on the preparatory studies. This examination takes place in the principal cities after the 20th of July of each year, the programme of the subjects of examination having been published on the 1st of the preceding April. The candidate must be a native or naturalized citizen of France, and between the ages of eighteen and twenty-one. Non-commissioned officers and privates of the regular corps are sometimes admitted till the age of twenty-five years, provided they have served under their colors at least — years. The Jury or Board at Paris decides on the admission of the candidates previously examined at other places. Those found proficient are admitted to the school after signing a certain voluntary engagement specified in the royal ordinances of March, 1832. The course of instruction continues two years. The annual expense is 1,500 francs, clothing not included. Those who graduate at the final examination are allowed to choose their arm of service according to their rank upon the merit.

roll established by the Board of Examiners; the number for each arm being fixed. Those appointed to the staff corps must join the staff school at Paris; those appointed to the cavalry must repair to the cavalry school at Saumur; but those assigned to the infantry immediately join their regiments. The staff of this school consists of a first and second commandant, one chef de bataillon, four captains, and five lieutenants. There is one director and one sub-director of studies, one professor of artillery, two of topography and mathematics, one of military history and art; one of fortification, two of belles lettres; two of history and geography, one of descriptive geometry, two of chemistry and physics, three of drawing, and two of the German language. The professors (except of the military art and military history) have each an assistant. There are six tutors, three masters of arms, one quartermaster, one treasurer, one chaplain, one librarian, three surgeons, and two physicians. The professors of scientific and military subjects are all military officers.

VI. COLLEGE ROYALE MILITAIRE, or, Royal Military College, at La Flèche, was established for the education of sons of indigent officers. It was instituted by the ordinance of May 12, 1831. The number of pupils supported by the State is three hundred *boursiers* and one hundred *demi-boursiers*. Others are admitted by paying their own expenses, which amount to eight hundred and fifty francs. The *demi-boursiers* must therefore pay about four hundred and twenty-five francs. The age of admission is from ten to twelve. The pupils can remain till between the ages of eighteen and nineteen.

The officers of the institution consist of a first and a second commandant, one captain, two lieutenants, one sub-lieutenant, twelve professors of humanities, one of physics and chemistry, one of special mathematics, two of general mathematics, one of the German language, one of the English language, three of drawing, one master of arithmetic, one of writing, eleven *fellows*, a chaplain, physician, surgeon, treasurer, librarian, &c.

VII. GYMNOSES MILITAIRES.—There are five military gymnaseurs of divisions, viz: at Arras, Metz, Strasbourg, Lyon, and Montpellier. Each is governed by a director; and there is also a general inspector.

VIII. ÉCOLES REGIMENTAIRES.—These regimental schools are numerous. They generally consist of merely a regular depot, supplied with all the necessities for a school of practice in the particular duties of the arm or corps. Some of them have permanent professors and instructors.

IX. The Schools of Roads and Bridges (*Ecoles des Ponts et Chaussées*), and those of Mines (*Ecoles des Mines*), are merely mentioned here because, though once connected with the military schools, they are no longer ranked as such. The former of these schools is designed for the instruction of the *aspirants* for the corps de ponts et chaussées, a body of civil engineers, in charge of certain of the civil works. The course of studies has in no sense a military character. The school is established at Paris. There are two schools of mines; the one at Paris, and the other at St. Etienne.

Remarks.—The French system of military schools of special instruction, is well worthy of the attention and imitation of our own Government. It is a fact, lamentable indeed, but too prominent and glaring to be concealed, that the officers of the army in garrison pay little or no attention to the study and practice of their profession, the trifling operation of guard-mounting, now and then a company drill, and, for three or four days in a year, practice at target-firing, constituting the sum total of their military exercises. With a few honorable exceptions, the study of professional books is a thing not thought of, after the few elementary ones learned at the military academy. This is certainly the state of things in our sea-coast garrisons. The writer speaks from personal knowledge. He knows nothing of the present habits of study at the inland and western posts; but is told that they are no better. How is this state of things to be remedied? By the establishment of schools of practice in each arm of service. Let no young officer be considered a candidate for promotion till he has pursued the course of instruction and passed a satisfactory examination in both the theory and practice of his own particular arm. This means would soon revive the drooping energies of our little army, and break up the habits of indolence and listlessness which seem to be rapidly fastening themselves upon our intelligent and gentlemanly junior officers. But few armies are supplied with more capable and accomplished subalterns than is furnished to ours by the Military Academy at West Point. But here their improvement and aspiration seem to end. Contact with indolent and effete seniority enervates and palsies all their energies. Indolence and thoughtlessness are soon found to be more agreeable than labor and mental application; and especially so, as the former are known to be equally conducive to military advancement.

The schools of practice of which we speak, could be organized with little or no expense to Government. By the selection of one of our larger forts, Fort Adams for example, and the collection of *matériel* at that place, a full and thorough course of practical and theoretical instruction could be given to the artillery appointments of the graduating classes of the academy, and officers drafted from the regiments. We shall speak of this again. We will merely remark here that the Fort Monroe School was not properly planned, and but half executed.

Instead of resorting to these special schools of practice and instruction, some entertain the idea that the difficulties we have mentioned may be remedied by making the West Point Academy more a school of practice and less a school of study; in other words, by lowering its scientific character, and elevating its *drill* character!! A change more destructive to that institution, and more injurious to the whole army, could not be devised. The academy is designed to impart a good *elementary*, scientific, and military education, equally suited to all arms of service; it is *not* a school of practice for either arm. Practice and the detailed instruction of the several arms must be acquired elsewhere; and if our officers neglect these attainments in time of peace, of what

value is a peace establishment? In justice to the officers we must remark, in closing, that this plan of changing the character of the academy is entertained only by the few effete seniors, and such juniors who are too indolent or ignorant to appreciate the value of a scientific military education; the great body of our efficient officers know well that, although a recruit can, in a few weeks, be *drilled* into a good soldier, years of study and application are requisite for forming officers capable of performing or directing the operations in war. They would deprecate any such change, as that mentioned, in the West Point Academy. Long may that institution maintain the high scientific character it has attained under its present organization, and palsied be the meddling hand that would seek to change that character by a different organization. When shall we learn to let well enough alone!

II. PRUSSIA.*

The military schools of Prussia for the instruction of both officers and sub-officers (*sous-officiers*) are very numerous; this results from the conviction that in modern armies it is necessary that the officers and non-commissioned officers should know something more than the manual, or the direction of a platoon; it is therefore admitted as a principle that the strength of an army consists as much in good theoretical as in good practical instruction, and that the one is as necessary and indispensable as the other to the success of military operations.

Admission to the Prussian military schools is almost entirely gratuitous. They are well endowed, so that their annual expenses are not onerous upon the public treasury. It is thought, with reason too, that military instruction cannot be better given than by officers in active service temporarily detached from their corps.

I. DIE ALLGEMEINE KRIEGS-SCHULE, or, the General War School, was established in 1816, in place of the Military School of Frederick the Great, and it occupies the same locality. So far as the order and discipline of the establishment is concerned, it is under the direction of a general officer. This school is organized for the purpose of completing the theoretic instruction of officers already familiar with the detail of the service of some particular arm, of initiating them to the solution of important questions in the art of war, and of thus forming a nursery for good general and staff officers.

No one can be received in the War School till he has passed an examination, and served at least three years in the capacity of officer. This examination is both written and verbal; it includes mathematics, history, geography, the German and French languages, and the tactics of the particular arm to which the candidate belongs. The candidates repair every year, about the month of March, to the head-quarters of their division; they present themselves before a commission appointed *ad hoc*, which unseals, in their presence, the questions sent from Berlin by the commission of studies, and they immediately set about

* This article and the two following are compiled, in great part, from M. Hailor's "Statistique Militaire, et Recherches sur l'Organisation et les Institutions Militaires des Armees Etrangères."

the work. The commission takes note of the time they employ and the books they consult. All the memoirs or essays, with the remarks of the commission, are transmitted to Berlin, where those officers are designated who deserve, by their works as well as by good military conduct, to be admitted to the War School.

The officers who are admitted must engage to serve at least two years for every one they remain at the school. The course of studies is three years. The most celebrated professors in the university and officers of distinction and experience take part in the instruction. In 1834, the course was taught by fourteen professors and ten officers. It begins about the 15th of October of each year, and closes on the 15th of July. Every six months the officers pass a written examination on the subjects which they have been taught. At the end of each academic year they return to their regiments for three months to resume their duties, except those officers whose corps are more than five days' march from the capital; these are attached to regiments in garrison at Berlin, or its environs.

Those who have not followed with profit the course of one year are not recalled to the schools on the following year. During their stay at the school, the pupils are obliged to visit several times, and in the minutest detail, the several military establishments at Berlin. At the end of the third year's course, they make, on horseback, directed by a superior officer, an excursion which might be called *strategic* in the environs of the capitol. They reconnoitre the ground, "*on fait des lenés à vére*," imagine two armies opposed, draw them up in battle array, manœuvre them, pass rivers, &c., &c. At the end of this sham-campaign, which usually continues fifteen days, the officers are required to present a detailed memoir with maps and plans of all their supposed operations.

This War School possesses a good military library of more than 15,000 volumes, magnificent maps, physical and chemical cabinets, halls of models, and reliefs of all the machines of war and works of fortification. A conversation hall, where are found the German and foreign journals, chess-boards, &c., serves as a general place of resort.

Thirty-six officers are annually received at this War School, four to each corps d'armée. In addition to this number, some other officers, whose corps are in garrison at Berlin, are permitted to attend the course. In 1834, the whole number of pupils was one hundred and thirty-one, one hundred and two of which were infantry, twenty-three cavalry, and six artillery.

The officers are not quartered in the buildings of the school, but receive an additional pay during their stay at Berlin. The expenses of this establishment on the war budget are annually 22,000 thalers,* equivalent to \$15,390 00.

Foreign officers frequently solicit and obtain permission to pursue the course of studies at the War School; and there are often found here officers from Sweden, Mecklenburgh, Baden, and other States of the Germanic Confederation.

* Equal to 62.4 cents.

The importance of this school for the officers and the army is incontestable. "The officers," says General de Caraman, "regard it as an honorable distinction to have been admitted to this school and pursued its course of studies. This puts them in the situation of being afterwards called to the most elevated employments in the army. This arrangement secures to the general staff officers of great distinction and intelligence, who thus join profound military knowledge with the experience of service with the troops."

II. DIE VEREINIGTE ARTILLERIE UND INGENIEUR SCHULE, or, the United Artillery and Engineer School, dates from 1816. The youth who enter this school after passing a preliminary examination, can here acquire the knowledge necessary for passing successfully the required examinations for the grades of ensign and officer of artillery and engineers. However, it is not rigorously necessary to have passed through the course of this school in order to become an ensign of artillery. Young men from the artillery brigade schools (*vide* hereafter) may present themselves directly for examination for these two grades; but this case is rarely presented, on account of the difficulties experienced in completing the course of studies in the schools of the provinces.

The following is the course ordinarily pursued; the candidates who have passed the preliminary examination, satisfactorily so, before entering the school, to spend a year in a brigade of artillery in order to become acquainted with practical instruction; after which they are examined on all that relates to ensigns of infantry and cavalry, especially technical knowledge. Those of them who are found deficient cannot serve in the artillery or engineers, but enter one of the other corps; the remainder obtain the rank of ensign, and continue the course a second year. A new examination on what is required to become an officer of infantry takes place at the end of this year; the ensigns who succeed in passing it are called adjunct officers (*aggregirten officiere*.) of artillery or of engineers. At the end of the third year an examination takes place on the knowledge particularly requisite for the officer of either of these two corps. Those who cannot pass a satisfactory examination enter the line; the others are classed in the artillery or engineers, according to the rank they obtain at the examination, and their peculiar qualifications for the duties of these two corps. The first inspectors of artillery and engineers have the general superintendence of this school, at the head of which are found an inspector, commandant, and director. The inspector is a general officer taken alternately from the two corps; the director is a superior officer taken from the corps (of engineers or artillery) to which the inspector does not belong.

The commission of studies, over which the inspector presides, regulates every thing relating to instruction. The annual register of the Prussian army gives only the military officers charged with this course, but we believe civil professors are also attached to the establishment.

The theoretic instruction embraces mathematics, pure and applied, chemistry and the physical sciences,

history and geography, civil, military, and hydraulic constructions, and the study of all machines relating to the art of war, fortification, tactics, and artillery, the German and French languages, and all the arts of design.

The practical instruction embraces the manual of the different arms and the use of all fire arms, the construction of batteries and field works, the chemical manipulations, the works of manufactories, models, and artillery magazines.

The establishment has a library, good model rooms, and cabinets of physics and chemistry.

This school, in a period of fifteen years, from 1816 to 1832, furnished to the army five hundred and sixty-six officers, that is, about forty per year.

It appears that since 1832 the youngest officers of artillery and engineers have been obliged to continue their course at the school some time after their appointments, in order to complete their instruction.

III. CADETEN-ANSTALTEN.—There are five schools for cadets, viz: the Institute at Berlin, where the young men graduate with the rank of officer or ensign; and four preparatory provincial schools, viz: that of Culm, for the first two corps d'armée; that of Potsdam, for the third and fourth corps d'armée; that of Wahlstadt, for the fifth and sixth corps d'armée; and that of Bensberg, for the seventh and eighth corps d'armée.

These five schools contain seven hundred and twenty charity scholars, one half of which are on full charity, one hundred and forty-four paying \$45, and two hundred and sixteen paying \$75. The full charities are reserved for the orphans of officers who have died on the battle-field or in active service; the others are given to sons of officers of different grades, having regard to the services and fortunes of their parents. Besides these there are admitted eighty-six half-pay pupils, sons of civil functionaries or of family, paying about \$140 per annum at Berlin, and about \$112 at the provincial institutions; and the same number of pupils who receive no support from Government, but pay to the school from \$220 to \$180 per annum, according to its particular locality.

The children admitted to the provincial schools are from eleven to twelve years of age, and must know how to read and write correctly. The course of studies is fixed at three years. The scholars are taught the first elements of the Latin, French, and German languages, and literature, elementary mathematics and their applications, history and geography, the elements of tactics, fortification, artillery, and the art of design.

In all these schools the religious instruction of the pupils is particularly attended to, and they are exercised in gymnastics, fencing, dancing, and swimming.

These schools have a military organization, the pupils being divided into companies and commanded by officers of the army. At Berlin the pupils are armed as infantry and do duty in the interior of the establishment. At the age of seventeen or eighteen years, those who have completed their studies are examined, and receive, according to their attainments, the brevet rank of ensign or officer; but those who

are found unworthy of this distinction are sent away to the regiments as private soldiers.

IV. DIVISIONS-SCHULEN, or, Division Schools, are formed, one for each division. As there are two divisions for each corps d'armée, the whole number of these schools is eighteen. They are established at perintendence of its commanding general; each has, the division head-quarters, and placed under the su- as a director, a superior officer or captain, and a di- rector of studies, who is most commonly the church minister attached to the division. All the course of studies is taught by the officers of the division; but the officers from the General War School are more particularly charged with this duty. In 1839 there were, among the eighteen military directors on duty, three colonels and ten majors.

These schools have been established for the pur- pose of giving the military youth who frequent them the means of acquiring the knowledge required at the examinations for the grade of ensign and officer.

Any individual who has served for six months can present himself as a candidate to the school of his division; but this candidate after having been admit- ted must pass a slight examination, and make an engagement to serve for a period fixed by the recruit- ing law. The number of persons admitted is limited, and proportioned to the probable number of vacan- cies in the grade of ensign.

The course begins on the 15th of October and ends the 15th July; at this time the pupils and professors return to their regiments for practical instruction. The course of studies is fixed at three years; in the first two the pupils are taught what is necessary for an examination for the rank of ensign; in the third year the ensigns complete the studies required for an examination for officers. The course of studies can- not be pursued for more than three years, but those who are found deficient at the examination for ensign are allowed a second and third examinations, and sometimes even a fourth. On the contrary, those who have been negligent and ill disposed to their studies are immediately sent away to their regiments.

By means of special funds, the Division Schools are abundantly provided with books, charts, instruments, and every thing necessary for instruction. The offi- cers charged with this course receive from these funds extra allowances.

V. DIE ARTILLERY-BRIGADE-SCHULE, is established in each brigade of artillery.—These are to the artil- lery what the Division Schools are to the infantry and cavalry. The young artillerists, candidates for ad- mission, are subjected to a preliminary examination, and when admitted receive a course of instruction qualifying them for an examination for the grade of ensign or officer.

Each of these schools is directed by a superior offi- cer or captain of artillery, and the course of studies is *professed* by the officers of the brigade. It in- cludes the German and the French languages, his- tory and geography, mathematics, fortification and artillery, the planning of all the machines of artillery and works of fortification.

The studies embrace a period of four years. The pupils are divided into two classes, and remain two

years, or rather two terms, in each class, the courses ordinarily beginning at the end of September, and closing at the end of April of the following year.

These schools have pretty considerable libraries, which are increasing every year: charts, maps, math- ematical instruments, &c. The pupils are gratui- tously furnished with all the books, charts, models, and instruments required in their studies.

Within the last few years they have also admitted to the first class course intelligent non-commissioned officers and gunners who have served three years, and who, on retiring, are to form a part of the artil- lery of the *landwehr* or militia. This praiseworthy measure tends to give to the artillery of the reserve intelligent officers and sub-officers.

VI. COMPAGNIE-SCHULE.—Each company of artillery has its own elementary school, directed by the cap- tain or first lieutenant. All the men, who are dis- posed, are admitted to the school and taught to read, write, and cypher, and the elements of artillery. The results are very satisfactory. (Do any officers in our own army attend to such praiseworthy duties?)

VII. DIE NEUE UNTER-OFFIZIER-SCHULE, or, the New School for Non-commissioned Officers, was found- ed some years ago, for the purpose of completing the military education of the scholars of the house of military orphans at Potsdam, and the children of the soldiers from the Institute of Annaburg, (see page 52.) and to open to them in an honorable way the career of arms. All of these pupils who have shown themselves worthy of entering the school of such of- cers, are admitted here at the age of seventeen years. They are taught the theoretical and practical know- ledge required to make a good sub-officer, and, after passing an examination, are placed in the army in that grade.

In addition to the above, other youth destined for the military profession, and having intelligence and some education, are admitted to this school.

Every thing in this institution is under military direction; it can contain three hundred pupils. Its organization is not yet complete, and it is intended hereafter to give it some extension.

VIII. DAS KÖNIGLICHE GROSSE MILITÄR-WEISEN- HAUS ZU POTSDAM; or, the Grand Military Orphan House at Potsdam.—The following account of this useful school is taken, in part, from Dr. Bache's re- port to the trustees of Gerard college in 1839. It was founded in 1724 by Frederick William the First of Prussia. Its endowments have since been so much increased by the munificence of the Kings, that it now enjoys a very considerable income. The doors of this establishment are opened twice each year (in April and October) to the orphans of sub-officers and soldiers of the Prussian army, the Government being "unwilling that the children of those who serve their country should be cast off upon the charity of the world." The institution began with one hundred and seventy-nine children, both boys and girls being re- ceived. This arrangement continued till 1829, when the girls' school was removed from Potsdam to the castle of Pretzsch, and the establishment at present is for male pupils only. In the early history of this orphan-house two attempts were made to introduce

manual labor as a profitable speculation, neither of which succeeded. The manufacture of Brabant lace was introduced in 1743, and finally abandoned in 1795. In 1744 the culture of silk was also attempted, but it was unsuccessful, and has, like the other, been abandoned.

The institution is divided into three departments. the elementary school, (*das Knabenhaus*), the trade school, and the music school. The whole number of orphans provided for in the establishment is about five hundred, the elementary department containing, when examined by Dr. Bache, between three and four hundred. The buildings are extensive, and admirably suited to the convenience and comfort of the occupants. The school is under the general direction of the War Department, which appoints some general officer superintendent, to whom all the other officers of the establishment are responsible. The director has usually the rank of colonel. There are, besides, a chaplain, treasurer, secretaries, teachers, commandants of companies, inspectors of schools, &c.

The poor orphan children of military parents receive maintenance from the funds of this school at any age; but if under six years, they are left with their parents and friends till that age, with a provision for their support. This provision depends upon the rank and necessities of the parents, and varies from about twenty-five cents to \$2 per month. They are admitted to the school at the age of six; at the age of fourteen or fifteen, if of good constitution, they are transferred to the trade or to the music school, where they remain four years longer, whence they pass to the school of non-commissioned officers, the battalion schools, or into the regiments, as musicians, artisans, and privates. Those who are not healthy, or who have failed in their elementary course, are apprenticed at fourteen, and the school takes no further charge of them. For instruction, the pupils are divided into four classes and two sections. The course includes reading, writing, and arithmetic, the German language, drawing, religious instruction, and a little natural history. A strict account is kept of each one's proficiency and conduct. For military exercises they are divided into four companies, and, when old enough, learn the manual of arms. They are all exercised in gymnastic games. The four companies are sometimes united, for drill, into a battalion; the most meritorious receive military rank in these company organizations; the pupils employed as superintendents over the others enjoy many privileges, and a part of them receive small pecuniary allowances. All are clothed alike in a military dress. The trade school is established for the double purpose of teaching the pupils useful trades, and to economise the support of the institution by making and repairing articles of necessity within its walls. The trades taught are those of blacksmiths, saddlers, tailors, shoemakers, and lithographers. The course of instruction is three years. The number of pupils in this department, when visited by Dr. Bache in 1837-'38, was one hundred and four. The musical department contained at that time about forty pupils. The object of this department is to supply musicians to the regimental bands. For this purpose, such pu-

pils of the elementary department as manifest a decided musical talent, are here thoroughly instructed in the theory and practice of music, keeping up at the same time their military discipline and exercises.

In return for the care taken of their infancy by Government, each one of the pupils are bound to enter the military service. The three years in the non-commissioned officers' school counts as a part of the twelve, and, as every citizen is bound to serve three years, the extra service for the orphans is in reality only six years.

IX. SCHOOL FOR FEMALE MILITARY ORPHANS AT PRETZSCH CASTLE.—The Prussian Government, in its wise foresight, extends its paternal care over the female orphans left by non-commissioned officers and soldiers. This school was separated from that of Potsdam in 1829, and established in the castle of Pretzsch, in the province of Saxony. The pupils receive a good primary education, and are taught work suited to their sex, so that in after life they gain an honest and honorable support. The school can contain two hundred orphans.

X. DAS MILITAIR KNABEN ERZICHTUNGS INSTITUT ZU ANNABURG; or, the Military Institute for Soldiers' Children at Annaburg. This school was founded in 1838 by Frederick Augustus, Elector of Saxony and King of Poland. It was first established at Dresden-Neustadt, and at the epoch of the seven years' war transferred to the castle of Annaburg, in the present circle of Torgau, province of Saxony. When Prussia acquired this duchy by the treaty of 1815, the Government was careful to continue an institution so useful to the army and so conformable to its own views of military organization. The state, therefore, supports at this school from four hundred to five hundred children of non-commissioned officers and soldiers, three-quarters of which are Protestant children, and the other one hundred and twenty-five Catholics. Children are received into this school till they are from ten to twelve years of age, and sometimes older. The course of instruction is much like that at Potsdam. (For a more detailed account see Bache's report.) All the pupils receive a good primary and religious education, and are taught all that is required to make good non-commissioned officers. At the age of fourteen they are taught music, or some trade useful to the army. Those fit for military service are placed, at the age of seventeen or eighteen, according to their merit, in the non-commissioned officers schools, the battalions of instruction, or into the regiments as musicians, artificers and privates. The course of instruction is divided into two parts, the first, including reading, writing, grammar, arithmetic, singing, and religious exercises; and the second, comprising arithmetic, the German language, singing, calligraphy, geography, history, algebra, geometry, trigonometry and drawing. For military exercises, they are divided into companies as at Potsdam, the most meritorious performing the duties of non-commissioned officers, and even officers in the school. The whole annual expense of this school amounts to about \$22,000.

XI. DAS KÖNIGLICHE MILITAIR KINDER-HAUS ZU STRALSUND, or, the Royal Military House for Chil-

dren at Stralsund, was founded by the Prince of Hessenstein in 1778, under the reign, and with the approbation of Gustavus III, King of Sweden. Stralsund was then the capital of Swedish Pomorania. When Prussia acquired this province by the treaty of Paris, the Government preserved the establishment at Stralsund, with a revenue sufficient for its support. By a cabinet order in 1816, this establishment is more particularly devoted to the education of the children of invalids, sub-officers, and soldiers of the battalions of the reserve; ninety boys and eighty girls are supported there. They receive an education suited to their condition, and each one is taught some trade.

XII. GARRISON SCHOOLS FOR CHILDREN OF THE TROOP are permanently established in all the cities of great garrisons, such as Berlin, Potsdam, Frankfort-on-the-Oder, &c., where gratuitous instruction is given both to the boys and girls. Pay-scholars are not received here: rectors and particular professors, and mistresses for the girls, are attached to these establishments.

In 1835 the school at Berlin contained one hundred and fifty pupils, that at Potsdam seven hundred and fifty, (for the children of persons on service at the castle were admitted there,) and that at Frankfort-on-the-Oder three hundred.

XIII. BATTALION OF INSTRUCTION AT POTSDAM.—This battalion is organized in April of each year; they admit to it a number of youth who have completed their education in the schools for the troop, at Potsdam and Annabourg, and officers, non-commissioned officers, soldiers and drummers of all the foot corps, on condition of engaging to serve thereafter for a period fixed by law. At the end of the term the battalion is broken up, and the military composing it are sent into the corps of the army; the non-commissioned officers and soldiers who have been in it afterwards wear a mark of distinction. The object of this school is to form good instructors, and to disseminate through the whole army uniform methods of instruction and practice.

XIV. SQUADRON OF INSTRUCTION.—This is annually organized at Berlin from the officers, non-commissioned officers, and soldiers of the cavalry and horse artillery, for the purpose of completing their theoretical and practical instruction, and giving them more extended views of hippotric and equitation. This establishment has the same relation to the cavalry that the preceding one has to the infantry, and both are regarded as forming a part of the royal guard.

COMMISSIONS OF EXAMINATION IN THE PRUSSIAN ARMY.

1. Commission on Military Studies.—This commission, presided over by a lieutenant general, is composed of a president, three superior officers, and men versed in the professorship to which the commission is attached; it directs every thing relating to the instruction of the military schools, appoints the professors, decides upon their capacity, draws up the programme of the studies, and takes note of the progress of studies in the several military establishments of instruction. It has not, we believe, any control of the General War School, nor the School of Artillery and Engineers, each of these having a special commission of their own.

2. Commissions for the examination for Ensigns. There are as many of these commissions as there are

division schools, the director of the school being *ex officio* president. The candidates are not examined by the commission of their own school, but by that of the other division of their corps d'armée. The reports of the commissions are addressed to the King, who appoints to the grade of ensign those who have complied with the conditions of the course.

3. Superior commission of examination at Berlin. This commission, presided over by a general officer and composed of nine members chosen from the officers of the army, is charged with examining the ensigns (except those in the engineers and artillery) who are candidates for the rank of officer. These ensigns previous to being sent to Berlin, have passed an examination before a commission of a division school to show that they already possess the requisite knowledge for becoming officers.

The King, on the report of the commission, forms a list of the ensigns who are eligible to the rank of officer, and appoints, without presentation on the part of the regiments, as second lieutenants, such as have passed a good examination. The ensigns who have been found deficient may present themselves a second and third time before the commission; but if this last trial fails, they cannot become officers. There are instances, however, where ensigns, particularly commendable by the length and character of their services, have been allowed a fourth examination, and obtained, by particular favor of the King, the rank of officer. The ensigns who go to Berlin for examination are quartered in barracks during the whole time of the session, which gives an opportunity to judge of their conduct and regularity of habits.

4. Commission of examination for First Lieutenants of Artillery.—The first lieutenants of artillery must pass an examination before they can be promoted to a captaincy. This examination is made in writing. In the month of January of each year the oldest first lieutenants who have not already complied with this condition obtain authority to go to Berlin, where they are examined by a commission, which is presided over by a general officer and composed of six superior officers or captains of artillery. The ulterior advancement of the candidates depends upon the result of the examination and the certificates of practical instruction given them by the chiefs of brigades of artillery.

5. Commission of Artillery at Berlin.—This commission is presided over by a general officer, and composed of seventeen members, officers of artillery, who are divided into six sections; it is charged with examining, experimenting, and deciding upon memoirs and projects made on the different branches of artillery service by officers of the corps. It possesses a fine library and numerous manuscripts; and has at its command, a detachment of artillery for making experiments.

6. Commission of examination for the second class captains of engineers at Berlin.—The captains of the second class before promotion to the first class of the corps of engineers, must pass an examination before a commission of one general officer, as president, and five superior officers of the corps, to show that they possess the requisite knowledge for a captain of the first class.

7. Commission of examination of high military questions.—This commission, according to the annual register of 1839, is presided over by Prince Augustus of Prussia, and composed of four general officers, and a superior officer as secretary. This commission is supposed to be called upon to pronounce on all questions and projects which are submitted to them, either by Government or military officers, relative to tactics, strategy, and the organization and administration of the army.

[To be continued.]

National Institute.

PAPER BY LT. M. F. MAURY, U. S. N.

READ, JULY 10, 1843.

HYDROGRAPHICAL OFFICE, 4th of July, 1843.

From the verge of perpetual snow in the arctic regions to the ice-bound continent of the south, thousands of vessels are continually passing to and fro on every sea, and in all directions. Each one of them, every day, makes some observation, or collects some fact of importance to the science of navigation, and which, if recorded and preserved, and collected in one body, would possess great value.

Allow me to call the attention of the National Institute to this subject, as one that presents a field altogether worthy of its high calling, and in which it may labor with the same promise of an early and abundant harvest of useful results.

If every vessel in the navy, and as many as would, in the merchant service, were each furnished with a blank chart, having only parallels and meridians drawn upon it to show latitudes and longitudes,—if their commanders were requested to lay off the tracks of their vessels upon it every day, with remarks showing the time of year, the direction of the winds, the force and set of currents, and embracing, generally, all subjects that tend in any manner to illustrate the navigation of the seas through which they sail, I have greatly mistaken the character of American navigators if they would not gladly lend the Society a willing hand in an undertaking so praiseworthy and useful.

Such charts would be to the science of navigation, what that presenting a series of blank squares, and known in the merchant's counting house as German music charts, is to observations and facts in magnetism and meteorology; they would show at a glance what volumes of written directions could but imperfectly describe. Multiplied observations upon the winds and currents alone of the ocean, would be invaluable in pointing out the shortest routes from port to port.

It is true, every vessel is required by usage and law to keep a log, in which, whatever occurs on board relating to the navigation of the vessel itself should be recorded. But the observations entered there are so surrounded by irrelevant matter, that, practically, they are of but little avail to navigators generally. The task of collecting and comparing, even if the log-books were accessible, is an undertaking which few would be willing to encounter. For several months past, an officer, under direction of the Bureau of Ordnance and Hydrography has been diligently engaged in overlooking the log-books of the navy, which are kept at the Navy Department. The object of his search was for facts relating to the gulf-stream. The books which he examined, and he examined all at the Navy Department, their proper place of deposit, run through a period of thirty-seven years, and are better kept than log-books generally are. Though every vessel that has sailed from the United States within that time has crossed the gulf-stream twice at least on every cruise, Lieut. Hern-

don could obtain its limits but in thirty-seven places, and the force and set of its current but in eight. Had each of these vessels, during a small portion of this time, been furnished with a blank chart after the plan proposed, the limits, force, and set of this stream might have now been so arranged as to be seen at a glance, and the results of the observations of all, if compared and laid down on one general chart, would have added much to our present knowledge; for to this day, the most of our information of the gulf-stream is in what was said of it by Doctor Franklin.

But, to make us acquainted with the limits, the strength, and the changes of this wonderful ocean current, would be among the least practical of the many valuable results to be expected from the introduction of such charts among navigators. We should have better knowledge of the other currents of the ocean, their periods and their fluctuations, we should have a more correct understanding of many other phenomena which are now but familiar mysteries to the mariner, and it would not be expecting too much, from such a multitude of observers, such a collection of facts, finally to be led from effects up to their causes.

As an illustration of the manner in which trifling incidents at sea may be turned to account, and of the value which facts, that singly and alone are worthless, possess when collected in numbers and brought together, the use of the "bottle chart" recently published in the Nautical Magazine, might be mentioned. Forty years ago, it was proposed to navigators to throw bottles overboard often at sea, with a paper in them, stating the time and place of doing it. Up to this time, papers have been collected from about one hundred and fifty bottles thrown in the Atlantic. These patient little navigators have put us in possession of a mass of the most valuable information touching the currents of this ocean; almost, if not quite equal in importance to all that is contained in all the books that have been written on the subject. The cruises of these bottles show that the gulf-stream, after impinging upon the coasts of England and France, is deflected along the shores of Portugal and Spain, and from the coast of Africa back into the Gulf of Mexico. If a few glass bottles and sea-weeds thrown at random in the sea, and picked up by chance on the shore, could, when brought together, each with its own story, give us such information, what might we not expect from a multitude of navigators directed by mind and intelligence, and pursuing the same subjects of inquiry?

Though ships may not perhaps give us so faithful an account of the most of the gentler currents of the ocean as bottles do, they would give us on those charts a true record of the limits, the seasons, and the direction of winds, which are of far more importance to the navigator than the currents that cross his way. This is a fruitful field, in which rich harvests are to be gathered by the first laborers who shall enter it, determined in their patience and perseverance.

Two vessels sail together for the same place; one arrives two, three, or even twenty days before the

other, according to circumstances. This is called "luck." And the master who makes short passages is called "a lucky fellow." But there is less of luck and chance in short passages than we are generally disposed to allow. Ships at sea are governed by winds, and the winds by laws as obedient as the planets in their rounds to the order of nature, and one captain habitually makes shorter passages than another, because he understands the operation of those laws better than his competitor; in other words, he has the benefit of more of those observations which these blank charts are intended to collect. As important as the results of such observations are, they can scarce be said to form a written branch of navigation. Except within the trades and monsoons, our knowledge as to the best routes for short passages is rather a matter of tradition among navigators, modified and improved by each one, it is true, for his own purposes and according to his own experience—at all times a dear, but always a profitable school. To use a western phrase, this chart proposes nothing less than to *blaze a way* through the wind of the sea, by which the navigator may find the best path at all seasons.

We find two vessels sailing about the same time from one of our ports, for Rio in the Brazils, making a difference of ten, twenty, thirty, or even forty days, in their time of passage. In such cases, their tracks invariably show that they take different routes.

Now suppose that for the next three years, every vessel trading between this country and Brazil should be furnished with a blank chart, and at the end of that time should return it to the Institute, with her tracks upon it, and full remarks for each day at sea, as to the prevailing winds, the currents, calms, rains, phosphorescence of the sea, &c., who can estimate the amount and value to commerce of the information thus collected, when brought together and compared? We venture but little in the opinion that the average length of passage hence to Rio, would be lessened one tenth. Besides such a practical and useful result, there would remain to us the benefits of all the collateral information besides.

It would be exceedingly interesting to put down upon our "chart of sailing directions" the limits of phosphorescence of the sea, as well as the average boundaries and breadth of the fresh winds for every month in the year, and to have for what it is worth, every observation relating to the air or water that bears upon the safe and expeditious navigation of the ocean. Multiplied observations effect much; for every new fact, however trifling it may seem, that is gathered from nature or her works, is a clue placed in our hands which assists to guide us into her labyrinth of knowledge.

A few generations past, and several months was the average passage from Lima to Valparaiso. Later, the commander of a vessel performed it in a month, and for it, he was tried as a wizard before the Spanish Inquisition. I have performed it in fourteen days, which, up to that time, was the shortest passage on record. The average passage then was twenty-three or twenty-four days; but since the Vincennes led the way, it has been frequently performed in less

time than she made it. I have known her to go in with a fast-sailing Englishman, just arrived on the coast, and which sailed from Callao ten days before she did. I could but attribute this difference of passage, not to luck, but to a better knowledge of the winds, which she had gained from experience, and which her chart, on which her track was daily projected, would impart to any navigator at a glance.

But fully to impress the learned members of this Society with just ideas of the great room there is for improvement in navigation in this respect, I have but to refer them to a few facts in the history of navigation between this country and Europe, and therefore over the most beaten parts of the ocean, where it might be supposed there is no room for improvement. Take the Liverpool packets, for instance: Which of them make the shortest passages? As a general rule, those whose masters have the most experience; who have crossed the greatest number of times, and, therefore, whose general knowledge of winds and seasons supplies them with the best "chart of sailing directions." But his chart is made up mostly of his own observations, while the one proposed will consist of his and a thousand others. It may not be expecting too much from such a chart to say it would materially lessen the average of passages even over the great thoroughfare between New York and Liverpool.

Just after the Atlantic steamers first commenced to run between this country and England, there appeared in the Southern Literary Messenger a piece with a chart, showing the advantages of "great circle sailing" in ocean steam navigation—a principle, the importance of which had been generally overlooked in works on navigation, and which before this era in practical navigation had not received that degree of attention to which it is fairly entitled, because, to vessels propelled by the winds, it was considered of but little practical importance. This "great circle sailing" is nothing more than an application to "traverse sailing" of the spherical axiom, that the shortest distance between two places different both in latitude and longitude, is not along the line of bearing, or the course from one to the other, but along the intercepted arc of that great circle which passes through them. By this chart it was shown, that the Great Western steamer, by attempting to follow the line of bearing from Bristol to New York, sailed, on her first trip, upwards of two hundred and sixty miles farther than she need to have done, and than she would have done had she laid her track as near as practicable to the arc of the great circle between her ports. She was furnished with a copy of this chart, and she and the other Atlantic steamers have regularly made their passages according to it ever since. The packets, too, have adopted it, as far as the winds would allow, and in some instances they have actually made passages to compete with the steamers in time.

Since then, a work on navigation has been published in England; and one of its chief recommendations is its chapter on "great circle sailing." Its author has been rewarded with a prize from the Royal Geographical Society, and the work itself ex-

tensively patronised by the Board of Admiralty, a copy of which they have ordered to be supplied to each of her Majesty's ships in commission.

A number of the Messenger containing this chart is on the table before you. By referring to it, it will be perceived that sailing as nearly on the arc of a great circle as the land will admit, Havre is not one hundred and fifty miles, or one day's sail, farther than Liverpool from New York, and that the great circle route to each, as far as Cape Clare, is precisely the same. The average packet passage from Liverpool to New York is thirty-five days, and from Havre, one hundred and forty-five miles farther, forty-four days. What should cause this difference of nine days? I have never been able to account for it in any other way than by supposing—and which I believe is the case—that the Havre packets, because it is out of their *course*, think it is out of their way, to make Cape Clare on their return voyage, and that by attempting the direct course, they consequently increase their distance, and meet with less favorable winds on this, the southern route.

A blank chart kept on board each of the European packets—and there is one arriving at, or departing from New York on an average of every thirty hours—and returned to the Institute after a few voyages, could not fail to throw valuable light on this subject.

The cases cited, and offering such an inviting field for labor, are drawn from the most frequented parts of the ocean. Not to detain the Society longer by dwelling on other advantages, not less obvious, it may be asked, if such be the room for improvements in the directory of the most frequented parts of the ocean, what may not be expected from those parts that are less travelled, and therefore less known?

Such is the rude state of this branch of navigation, or, more technically, in the sailing directions for the OCEAN, that if a vessel, which had never been there before, were now to leave this place for the West Indies, or other parts equally as much frequented, the chances are that she would no where find among the nautical works of the day any directions as to her best route. If she found any thing said of it at all, it would be merely a casual remark incidental to some other subject. She might, indeed, find on the chart the track of some vessel that made the voyage fifty or more years ago, but quite at another season of the year, and, therefore, more calculated to mislead than to guide. Captain Cook's track is still retained on the charts of those parts of the ocean over which he sailed, and is often the only track published. I have just received a set of the latest publication of English admiralty charts. Captain Carteret's track in 1787, and Admiral Boscawen's, are the only ones laid down around the Cape of Good Hope. In the case of the vessel supposed to sail to the West Indies, she may have a passage of ten, twenty, or thirty days, according to the route she takes, and, as before intimated, the "sailing directions" as to her best route is rather a matter of tradition among seamen, than a written branch of navigation; and some old cruiser to the West Indies, rather than any book, would be consulted as to the best route.

It is a source of great satisfaction to the naviga-

tor, particularly on his first voyage to any part of the world, to find that the track engraved on his chart was made at the season of the year in which he happens to make his voyage. Whether it indicates the shortest route, is another question; the probabilities are that it does not, for it is for the most part the track of some early navigator, and his only voyage over the regions crossed, and, therefore, made very much at random; nevertheless, in the absence of others, it is highly useful. But if the tracks of Cook, and Carteret, and Boscawen, made on their random cruises from sea to sea, during the last century, are valuable to the navigator of the present day, because they afford him not only the best, but often the only information as to the navigation of the latitudes in which he may be sailing, in what estimation would he not hold a chart that contained nothing but the tracks of vessels passing over it at all seasons and in all directions, each one giving a full and faithful account of winds, currents, &c., encountered by him?

But to confirm the advantages of "charts of sailing directions" to one single point: If, by a systematic record of a few every-day remarks upon the winds and currents of the ocean, the Institute should be enabled to point out to the Havre packets a route by which the remarkable difference of passage between them and the Liverpool line should be removed, it would be doing nothing less than lifting up a great kingdom of people, and placing them, with their arts and sciences, their wants and supplies, a week nearer in communication with us. Nothing less than drawing around two Christian nations, with all the force that commerce and its multiplied interests can give, closer ties of friendship and stronger bonds of peace.

Such, at least in kind, if not in degree, are some of the most palpable advantages to be derived from the plan now proposed for the consideration of the Institute.

Every sailor carries with him to sea, for certain purposes of his own, a *carte blanche*, and, therefore, there is nothing new to him, at least, in the idea of a blank chart; neither do I pretend to any thing like novelty in the matter. Although blank charts have been partially and frequently used on board ships at sea, I know of no systematic attempt that has been made, at least in this country, to collect the information suggested, either upon the plan proposed, or in any other regularly organized and extensive system, reaching to all classes of vessels. Should the Institute deem the subject worthy of its attention, it is hoped it will act, irrespective of any opinion here expressed, by the means and mode which to it may appear the most suitable.

NOTICE TO MARINERS.—Buoys have been passed within a few days past, at the following points on the Potomac river: 1 at Craney Island Bar, 1 at Maryland Point, 1 at Port Tobacco Shoals, 1 at Persimmon Bar, 1 at Lower Cedar Point, 1 at Large Kettle Bottom, 1 at the Kettle Bottom, 1 at Ragged Point. Some of these buoys are merely to replace old ones, others are stationed at new points.

WASHINGTON.

THURSDAY, JULY 13, 1843.

THE CABINET.

Hon. A. P. UPSHUR, Secretary of State.
 Hon. JOHN C. SPENCER, Secretary of the Treasury.
 Hon. J. M. PORTER, Secretary of War.
 Hon. DAVID HENSHAW, Secretary of the Navy.
 Hon. CHARLES A. WICKLIFFE, Postmaster General.
 Hon. JOHN NELSON, Attorney General.

JAMES HAMILTON, of Lexington, has been appointed agent for the inspection, test, and purchase of American hemp, in the State of Kentucky, for the use of the Navy.

DEATH OF GEN. EUSTIS.

At a meeting of the officers of the *Fourth Regiment of Artillery*, convened at *Carroll Hall, Fort Monroe, Va.*, on the 2d July inst., on intelligence of the death of Brigadier Gen. ABRAHAM EUSTIS, *Colonel Fourth Regiment of Artillery*. Present:

Col. J. B. Walbach, Major F. S. Belton,
 Capt. P. H. Galt, Capt. and Bvt. Major H.
 Capt. and Bvt. Maj. W. Brown,
 W. Morris, Capt. J. B. Scott,
 Capt. W. P. Bainbridge, 1st Lieut. R. C. Smead,
 1st Lt. & Adj. J. H. Miller, 1st Lieut. J. P. O'Brien,
 1st Lieut. J. W. Phelps, 1st Lieut. T. L. Brent,
 1st Lieut. T. Williams, 1st Lieut. E. Bradford,
 2d Lieut. J. P. McCown, 2d Lieut. G. W. Getty,
 2d Lt. S. S. Fahnestock, 2d Lieut. C. Benjamin,
 2d Lieut. H. M. Whiting, 2d Lieut. G. W. Rains.

Col. WALBACH was called to the chair, and Adj. MILLER to act as Secretary.

A committee (Major BELTON, Captain GALT, and Brevet Major BROWN, appointed to draft resolutions expressive of the sense of the meeting on the melancholy occasion) reported the following, which were adopted:

1st. That a testimonial of respect to the memory of Brigadier General EUSTIS may with peculiar fitness emanate from this post, its garrison being the largest of the arm of service which he so much honored, and the scene of his own special commands, embracing, during many years, every regiment of artillery; and from the *fourth* regiment of artillery especially, of which he was, for so many years, the *lieutenant colonel* and frequent commander.

2d. That the spotless personal character of Gen. EUSTIS, his high soldiership, and his stern, uniform, and inflexible impartiality and justice in command, will long be borne in respectful remembrance and veneration by us, and that we cordially join with the COMMANDER OF THE ARMY in the sentiment on this sad occasion—that “the army has indeed lost a distinguished light and ornament, and the country one of its most patriotic and gallant defenders.”

3d. That we tender to Mrs. EUSTIS, in her own right so well entitled to our kindest feelings and recollections from associations of the past, our sincerest sympathies on her bereavement, with the as-

surance that this regiment can but always take a deep interest in all that may concern her.

4th. That we tender to our brother officers of the *First Regiment of Artillery* our condolence on the great loss they have sustained, and that we will gladly unite with them in any further evidences of respect to the memory of their late COLONEL.

5th. That we wear the usual badge of mourning for thirty days.

6th. That copies of these proceedings be forwarded to Mrs. EUSTIS and to the Headquarters of the *First regiment of Artillery*, and that they be published in the *National Intelligencer* and the *Army and Navy Chronicle*.

J. B. WALBACH, Col. 4th Art.,
 Chairman.

J. H. MILLER, Adjutant 4th Artillery,
 Secretary.

ARMY.

GENERAL HEADQUARTERS OF THE ARMY,
 ORDERS, } ADJUTANT GENERAL'S OFFICE,
 No. 42. } Washington, July 7, 1843.

Promotions and Appointments in the Army of the United States, since the publication of “*General Orders*,” No. 19, of March 6, 1843.

I.—PROMOTIONS.

CORPS OF ENGINEERS.—Brevet 2d Lieut. W. S. Rosacrans, to be Second Lieutenant, April 3, 1843, *vice* Butler, deceased, (brevet July 1, 1842.)

FIRST REGIMENT OF ARTILLERY.—Lieut. Colonel I. B. Crane, of the 4th Artillery, to be Colonel, June 27, 1843, *vice* Eustis, deceased.

SECOND REGIMENT OF ARTILLERY.—Brevet Major W. L. McClintock, Captain of the 3d Artillery, to be Major, June 27, 1843, *vice* Payne, promoted.

THIRD REGIMENT OF ARTILLERY.—First Lieut. William Wall, to be Captain, June 27, 1843, *vice* McClintock, promoted.

Second Lieutenant W. H. Churchill, to be First Lieutenant, June 27, 1843, *vice* Wall, promoted.

Brevet Second Lieutenant Joseph Stewart, of the 1st Artillery, to be Second Lieutenant, June 27, 1843, *vice* Churchill, promoted.

FOURTH REGIMENT OF ARTILLERY.—Major M. M. Payne, of the 2d Artillery to be Lieutenant Colonel, June 27, 1843, *vice* Crane, promoted.

SIXTH REGIMENT OF INFANTRY.—First Lieutenant Samuel Woods, to be Captain, February 27, 1843, *vice* Brown, promoted.

Second Lieut. James Belcher, to be First Lieut., February 27th, 1843, *vice* Woods, promoted.

Brevet Second Lieutenant R. W. Kirkham, of the 2d Infantry, to be Second Lieut., February 27, 1843, *vice* Belger, promoted, (brevet July 1, 1842.)

SEVENTH REGIMENT OF INFANTRY.—Captain Jacob Brown, of the 6th Infantry, to be Major, February 27, 1843, *vice* Nelson, deceased.

EIGHTH REGIMENT OF INFANTRY.—Brevet 2d Lieutenant Cyrus Hall, of the 1st Infantry, to be Second Lieutenant, July 1, 1843, *vice* McCalmont, resigned, (brevet July 1, 1842.)

II.—The following named CADETS, graduates of the Military Academy, are attached to the Army as supernumerary officers with the *Brevet* of Second Lieutenant, in conformity with the law, and the direction of the PRESIDENT, to rank from July 1, 1843.
Brevet Second Lieutenants attached to the Corps of Topographical Engineers.

RANK.

1. Cadet William B. Franklin, of Pennsylvania,
2. Cadet George Deshon, of Connecticut,

Brevet 2d Lieutenants attached to the Artillery Arm.

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| 3. Cadet Thomas J. Brereton, | [A. 4th Art.] |
| 4. Cadet John H. Grelaud, of Penn., | [H. 1st Art.] |
| 6. Cadet Isaac F. Quimby, of N. J., | [D. 2d Art.] |
| 7. Cadet Roswell S. Ripley, of N. Y., | [C. 3d Art.] |
| 8. Cadet John J. Peck, of New York, | [G. 2d Art.] |
| 9. Cadet John P. Johnstone, of Va., | [C. 4th Art.] |
| 10. Cadet Joseph J. Reynolds, of Ia., | [I. 4th Art.] |
| 11. Cadet James A. Hardie, | [B. 1st Art.] |
| 12. Cadet Henry F. Clarke, of Penn., | [E. 2d Art.] |
| 14. Cadet Samuel G. French, of N. J., | [F. 3d Art.] |

Brevet 2d Lieutenants attached to the Infantry Arm.

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| 5. Cadet William F. Raynolds, Ohio, | [E. 5th Inf.] |
| 13. Cadet Jacob J. Booker, of Indiana, | [A. 1st Inf.] |
| 15. Cadet Theodore L. Chadbourne, | [A. 2d Inf.] |
| 16. Cadet Christopher C. Augur, Mich., | [G. 2d Inf.] |
| 17. Cadet Franklin Gardner, of Iowa, | [E. 7th Inf.] |
| 19. Cadet Edmund B. Halloway, Ky., | [C. 4th Inf.] |
| 21. Cadet Ulysses S. Grant, of Ohio, | [I. 4th Inf.] |
| 22. Cadet Joseph H. Potter, of N. H., | [F. 1st Inf.] |
| 23. Cadet Robert Hazlitt, of Ohio, | [G. 4th Inf.] |
| 24. Cadet Edwin Howe, | [B. 5th Inf.] |
| 25. Cadet Lafayette B. Wood, of Va., | [C. 8th Inf.] |
| 26. Cadet Chas. S. Hamilton, of N. Y., | [K. 2d Inf.] |
| 27. Cadet Wm. K. Van Bokkelen, N. Y., | [B. 7th Inf.] |
| 28. Cadet Alfred Crozet, | [C. 7th Inf.] |
| 29. Cadet Charles E. Jarvis, of Maine, | [G. 3d Inf.] |
| 30. Cadet Frederick Steele, of N. Y., | [C. 2d Inf.] |
| 31. Cadet Henry R. Selden, of Vt., | [H. 1st Inf.] |
| 33. Cadet Frederick T. Dent, of Mo., | [B. 6th Inf.] |
| 34. Cadet John C. McFerran, of Ky., | [K. 3d Inf.] |
| 35. Cadet Henry M. Judah, of N. Y., | [D. 8th Inf.] |
| 36. Cadet Norman Elting, of N. Y., | [I. 6th Inf.] |
| 38. Cadet Charles G. Merchant, | [B. 8th Inf.] |
| 39. Cadet George C. McClelland, of Pa., | [E. 3d Inf.] |

Brevet 2d Lts. attached to the Regiment of Riflemen.

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| 18. Cadet George Stevens, of Vermont, | [A.] |
| 20. Cadet Lewis Neill, of Virginia, | [I.] |
| 32. Cadet Rufus Ingalls, of Maine, | [B.] |
| 37. Cadet Cave J. Coutts, of Tennessee, | [C.] |

The foregoing assignment to regiments and companies will be regarded as a temporary arrangement, necessary for the convenience of the service. Vacancies will be filled according to seniority in the particular Arm, in conformity with the established rule.

III.—CASUALTIES.**RESIGNATION. (1.)**

Second Lieutenant J. S. McCalmont, 8th infantry, July 1, 1843.

DEATHS. (3)

Brevet Brigadier General Abraham Eustis, Col. 1st Art. at *Portland, Maine*, June 27, 1843.

Major J. S. Nelson, 7th Inf., at *Tampa Bay, Florida*, February 27, 1843.

Second Lieutenant R. Q. Butler, Corps of Engineers, at sea, April 3, 1843.

IV.—The officers promoted and appointed will join their proper stations and companies without delay; those on detached service or acting under special instructions, will report by letter to the Commanding officers of their respective regiments.

V.—The usual leave of absence allowed by the Regulations is hereby granted to the several graduates; at the expiration of which (*September 30*) they will join their proper stations and Regiments.

VI.—Acceptances or non-acceptances of appointments will be reported to the Adjutant General of the Army; and in case of acceptance the officer will immediately subscribe to the Rules and Regulations, enjoined by the 1st Article of War. He will also report his birth place, and the State from which appointed.

VII.—The Headquarters of the 6th Military Department are changed from Portland, Maine, to Portsmouth, New Hampshire.

VIII.—On the mutual application of the parties, Colonel and Brevet Brigadier General Z. Taylor, of the 1st, is transferred to the 6th infantry, and Colonel W. Davenport, of the 6th, is transferred to the 1st infantry. They will be reported accordingly.

BY COMMAND OF MAJOR GENERAL SCOTT:

L. THOMAS,

Assistant Adjutant General.

MEMORANDA.—Transfers.

Second Lieutenant G. W. Rains, of the Corps of Engineers, to the 4th Artillery, to take effect on the happening of the first vacancy in that Regiment.

Second Lieutenant Henry Little, of the 5th Infantry, to the 7th Infantry, to take place on the Army Register next below Lieutenant Henshaw.

Brevet 2d Lieutenant J. W. Abert, of the 5th Infantry, to the Corps of Topographical Engineers.

Second Lieutenant P. D. Geisse, of the 7th Infantry, to the 5th Infantry, to take place on the Army Register next below Lieutenant Norvell.

NAVY.

July.

ORDERS.

5—Lt. R. Semmes and Boatswain J. Hunter, sloop Warren, Norfolk.

Lt. D. McDougal, ship Franklin, New York, for temporary duty.

Ass't Sur. J. W. Taylor, receiving-ship Boston, vice C. H. Wheelwright detached, and to the Independence.

Ass't Sur. C. Eversfield, sloop Decatur, Norfolk. P. Mid. G. B. Balch, Depot of Charts &c., Washington.

Prof. of Math. B. McGowan, sloop Warren, Norfolk.

2d Ass't Engineer J. S. Rutherford and 3d Asst's Thomas Dickson and Smith Thompson, jr., detached from steamer Missouri.

6—Comm'r J. B. Hull, command of sloop Warren, Norfolk, vice Wm. Inman, order revoked and to be ready to take command of steamer to be employed on Lake Erie.

Lieuts. B. Shepard, J. W. Livingston, and R. E. Johnson, ship Franklin, New York, for temporary duty.

P. Mid. J. S. Taylor, schooner On-ka-hy-e, Norfolk, as acting master.

P. Mid. Wm. A. Henry and John Wilkinson, schooner Phenix, Norfolk.

7—Master R. S. Tatem, ship Franklin, New York, for temporary duty.

8—Comm'r H. A. Adams and Lt. Stephen Johnston, to continuation of survey of Memphis, Tenn., by 20th October.

Lt. A. S. Baldwin, ship Independence, N. Y.

P. Mid. C. S. Throckmorton, steamer Missouri, Washington.

Mid. C. W. Place, frigate Macedonian, Norfolk.

10—Comm. Jesse Wilkinson, to be port captain, Boston.

Captain Silas H. Stringham, command of navy-yard, New York.

Lt. E. C. Ward, sloop Decatur, Norfolk, vice C. B. Poindexter, leave two months.

11—Lt. E. Farrand, detached from navy-yard, Pensacola.

Sur. D. C. McLeod, detached from sloop Marion, and leave three months.

P. Mid. J. D. Read, Brazil squadron.

P. Mid. L. Gibbon, schooner Phenix, Norfolk.

Mid. H. H. Harrison, sloop Decatur, Norfolk.

Mid. Joseph S. Day, sloop Decatur, Norfolk.

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